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AGRICULTURE, DRAINAGE DISTRICTS, AND THE CLEAN WATER ACT: DOES WHAT HAPPENS IN DES MOINES STAY IN DES MOINES?

Harrison Pittman
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I. INTRODUCTION

On January 9, 2015, Des Moines Water Works ("DMWW")¹ communicated its intent to file a lawsuit involving several Iowa drainage districts "for the discharge of pollutants into the Raccoon River in violation of the Clean Water Act, Iowa Code § 455B.186, and for other claims under state statute and common law of nuisance, trespass, and negligence."² In March 2015, after the requisite sixty-day notice period mandated by the "citizen suit" provisions of the CWA had passed,³ DMWW filed its complaint in the United States District Court for the Northern District of Iowa.⁴

DMWW argues, *inter alia*, that the discharge of nitrates by the drainage districts at issue constitutes a discharge of a pollutant by a "point source" under the CWA, and therefore the districts must obtain a National Pollution Discharge Elimination System ("NPDES") permit in order to

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¹ The DMWW was established in 1871 to serve as an independently owned and operated public utility. Today, DMWW is the largest water utility in Iowa and is managed by a five member Board of Trustees, each of whom is appointed by the Mayor of the City of Des Moines. *See* Complaint at 14, Bd. of Water Works Trs. of Des Moines, Iowa v. Sac Cnty. Bd. of Supervisors, No. 5:15-cv-04020, 2015 WL 1191173 (N.D. Iowa 2015) [hereinafter DMWW Complaint], *available at* <http://www.circleofblue.org/waternews/wp-content/uploads/2015/03/Board-of-Water-Works-Trustees-CWA-Lawsuit.pdf>.

² Letter from William Stowe, Sixty-day Notice of Intent to Sue 2 (Jan. 9, 2015) [hereinafter DMWW Letter], *available at* <http://www.dmww.com/upl/documents/about-us/announcements/notice-of-intent-to-sue.pdf>. In the letter, DMWW sometimes refers only to the Raccoon River, but refers to both the Raccoon River and the Des Moines River at other times.

³ 33 U.S.C. § 1365(b)(1)(A) (2015).

⁴ DMWW Complaint, *supra* note 1.

lawfully discharge.⁵ In so doing, DMWW asserts that the discharges at issue fall outside the “agricultural stormwater discharges” exemption under the CWA definition of “point source.”⁶ Thus, as discussed in more detail below, the lawsuit offers a critical test of the boundaries of the CWA “agricultural stormwater discharges” exemption and, therefore, carries significant regulatory enforcement implications relative to agricultural production in Iowa and beyond.⁷

This article provides a basic overview of the CWA provisions most relevant to the DMWW action, a discussion of the DMWW CWA arguments presented in the DMWW action, and decisions potentially relevant to the DMWW decision. In so doing, this article focuses on the CWA arguments raised in the January 2015 notice of intent to sue and the plaintiff’s complaint⁸ filed in March 2015.

The article also highlights three related legal and policy issues that help inform the broader context in which the DMWW action arises. These issues include the jurisdictional scope of the CWA in the wake of the “waters of the United States” final rule issued by the EPA and the U.S. Army Corps of Engineers in 2015, the intensification of the debate over the development of numeric nutrient water quality criteria, and the scope of the EPA’s authority to develop Total Maximum Daily Loads (TMDLs) following the United States Court of Appeals for the Third Circuit decision in *American Farm Bureau Federation v. EPA*.⁹ These issues are not immediately germane to the merits of the DMWW CWA arguments, but could be of added long-term legal and policy significance depending on the outcome of the DMWW action.

II. THE CLEAN WATER ACT: AN OVERVIEW

In 1972, Congress enacted the CWA “to restore and maintain the chemical, physical, and biological integrity of the nation’s waters.”¹⁰ The CWA applies to “navigable waters,” which are defined as “the waters of the United States, including the territorial seas.”¹¹ The scope of what constitutes

⁵ DMWW Complaint, *supra* note 1, at 14. In addition to the CWA claims, DMWW alleges several other causes of action. These include violation of Iowa statutory law, public nuisance, statutory nuisance, private nuisance, trespass, negligence, taking without just compensation, due process and equal protection, and injunctive relief. This article focuses only on the CWA claims.

⁶ *Id.*

⁷ *Id.*

⁸ *Id.* at 30.

⁹ *Am. Farm Bureau Fed’n v. U.S. EPA*, 792 F.3d 281, 306 (3d Cir. 2015).

¹⁰ 33 U.S.C. § 1251(a) (2015).

¹¹ *Id.* § 1362(7).

a "water of the United States," as discussed below, remains the subject of considerable controversy that continues to play out in the executive, judicial, and regulatory branches of government.¹²

The CWA distinguishes between "point source" and nonpoint source pollution.¹³ The CWA defines "point source"—the crux of the DMWW CWA argument—as follows:

[A]ny discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. *This term does not include agricultural stormwater discharges and return flows from irrigated agriculture* (emphasis added).¹⁴

The CWA does not define nonpoint source pollution, but it is commonly defined as water runoff that emanates from broad areas such as that from agricultural and non-agricultural areas, rather than from a specific point of discharge.¹⁵

The CWA treats point source and nonpoint source pollution quite differently. Specifically, the CWA requires that a National Pollution Discharge Elimination System (NPDES) permit be obtained in order to lawfully discharge a "pollutant" from a "point source" into navigable water.¹⁶ The CWA defines "discharge of a pollutant" as "any addition of any pollutant to waters from any point source."¹⁷ The CWA authorizes the EPA to issue an NPDES permit that allows a point source to lawfully discharge a

¹² See generally CLAUDIA COPELAND, CONG. RESEARCH SERV., RL43455, EPA AND THE ARMY CORPS' RULE TO DEFINE "WATERS OF THE UNITED STATES" 7 (2015), available at <http://nationalaglawcenter.org/wp-content/uploads/assets/crs/RL43455.pdf>.

¹³ See generally *Waterkeeper Alliance, Inc. v. U.S. EPA*, 399 F.3d 486, 505 (2d Cir. 2005).

¹⁴ 33 U.S.C. § 1362(14) (emphasis added).

¹⁵ See, e.g., *League of Wilderness Defenders/Blue Mountains Biodiversity Project v. Foregren*, 309 F.3d 1181 (9th Cir. 2002) ("[N]onpoint source pollution is . . . widely understood to be the type of pollution that arises from many dispersed activities over large areas, and is not traceable to any single discrete source. Because it arises in such a diffuse way, it is very difficult to regulate through individual permits.").

¹⁶ See, e.g., *Ass'n to Protect Hammersley, Eld. & Totten Inlets v. Taylor Res., Inc.*, 299 F.3d 1007, 1009 (9th Cir. 2002) ("A cornerstone of the Clean Water Act is that the 'discharge of any pollutant' from a 'point source' into navigable waters of the United States is unlawful unless the discharge is made according to the terms of an NPDES permit obtained from either the United States Environmental Protection Agency . . . or from an authorized state agency.").

¹⁷ 33 U.S.C. § 1362(7) (2015).

pollutant into a water of the United States, subject to effluent limitations and restrictions contained in the NPDES permit.¹⁸ Nonpoint source pollution is addressed through voluntary programs administered at the state level that do not involve permitting under the CWA.¹⁹ The CWA defines "pollutant" to include the following:

[D]redged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste discharged into water.²⁰

The CWA also contains a "citizen suit" provision that allows private entities or individuals to file a legal action "against any person, including the U.S. Government or other government instrumentality for an alleged violation of an effluent standard or limitation or an order issued by the EPA or a State."²¹ The person bringing the citizen suit must provide notice of their intent to bring the action, unless the issue is remedied such that it negates the need to bring the action.²²

III. DMWW LAWSUIT

On January 9, 2015, the DMWW Board of Trustees notified the Chairpersons of the Sac County Board of Supervisors, the Calhoun County Board of Supervisors, the Buena Vista County Board of Supervisors, as well as other local and state officials, of their intent to file a "citizen suit" regarding concerns about nitrate pollution entering the Raccoon and Des Moines Rivers from drainage districts.²³ In the notice, DMWW detailed, *inter alia*, its concerns over nitrates in the water supply, the financial costs it claims it must bear to properly clean the water as a result of the presence of

¹⁸ *Id.* § 1342(1).

¹⁹ *Id.* § 1329(b).

²⁰ *Id.* § 1311(a); see *N. Plains Res. Council v. Fid. Exploration & Dev. Co.*, 325 F.3d 1155 (9th Cir. 2003). In that case, the defendant discharged groundwater extracted during the process of gathering coal bed methane. Even though the groundwater was discharged in an unaltered state, the natural minerals that the water carried were found to be a pollutant under the CWA and the water itself to be an industrial waste. This case may be of limited precedential value (i.e., the groundwater was from an industrial use instead of agricultural). However, the fact that unaltered groundwater may be a pollutant under the CWA could be relevant in the DMWW lawsuit.

²¹ 33 U.S.C. § 1365(a)(1).

²² *Id.* § 1365(b).

²³ See DMWW Letter, *supra* note 2, at 1.

high concentrations of nitrates, and human health risks associated with high levels of nitrates.²⁴ The letter also stated that “[e]utrophication and the development of hypoxic conditions in the Gulf of Mexico’s dead zone are also directly attributable to nutrient transport from agriculture into the tributaries of the Mississippi, including the Raccoon River and Des Moines River.”²⁵ While not germane to the merits of the DMWW’s CWA claim, the mention of hypoxic conditions is noteworthy in light of the debate the EPA should develop federal numeric nutrient criteria throughout the Mississippi River Basin.²⁶

On March 16, 2015, DMWW filed its complaint in the United States District Court for the Northern District of Iowa.²⁷ It sought a declaratory judgment, arguing that the drainage districts have violated the CWA “by failing to comply with the effluent limitations prescribed by the . . . [CWA’s] NPDES permit system . . . injunctive relief, civil penalties, and the award of costs, including attorney and expert witness fees.”²⁸

The complaint details DMWW’s concerns over nitrate pollution in the Raccoon and Des Moines Rivers and asserts the following:

A major source of nitrate pollution in the Raccoon River watershed is the artificial subsurface drainage system infrastructure, such as those created, managed, maintained, owned and operated by the Drainage Districts, consisting of pipes, ditches, and other conduits that are point sources which transport high concentrations of nitrate contained in groundwater.²⁹

To understand the legal issues raised by the DMWW action, one must have at least a cursory understanding of the use of tile drainage in agricultural production,³⁰ a common practice in Iowa.³¹ Generally stated, tile drainage optimizes the productivity of agricultural lands by removing excess

²⁴ See *id.* at 2.

²⁵ *Id.* at 3.

²⁶ See *id.* In light of the issues involved in *Gulf Restoration Network v. EPA*, discussed in more detail below, this is an important statement for DMWW to include in its notice of intent to sue.

²⁷ DMWW Complaint, *supra* note 1, at 52.

²⁸ *Id.* at 2.

²⁹ *Id.* at 3.

³⁰ The explanation provided here is cursory in nature. It does not account for the varying types of legal status that drainage districts may have from one jurisdiction to another.

³¹ See Don Hofstrand, *Understanding the Economics of Tile Drainage*, IOWA STATE UNIV. EXTENSION & OUTREACH 1 (July 2010), available at <https://www.extension.iastate.edu/agdm/wholefarm/pdf/c2-90.pdf>.

subsurface moisture from the soil.³² The tiles are typically located underground and transport water through numerous underground pipes until they exit into open ditches or other pathways.³³ Farmers will install and maintain the drainage tile on their own property, which flow into ditches or other structures along the property's boundary.³⁴ Drainage districts, such as the ones at issue in the DMWW action, are the administrative entities that typically oversee the construction and maintenance of the ditches, and similar structures, that facilitate drainage from the boundaries of many farm fields in the watershed to its final destination.³⁵

The DMWW lawsuit targets the drainage districts and counties that exercise administrative control over them, rather than the farmers and landowners whose tile drainage emanates from privately owned agricultural lands at issue.³⁶ That said, DMWW alleges that "[t]he primary purpose of the Drainage District infrastructure is to remove water from agricultural lands, including groundwater containing a high concentration of nitrate."³⁷ It further alleges that "[s]ubsurface tile and pipe and surface ditches and channels created and maintained by the Drainage Districts are connected to private subsurface tiles to convey groundwater within each of the Drainage Districts to streams and rivers, and ultimately to the Raccoon River."³⁸

If DMWW ultimately succeeds on its CWA argument, that the drainage districts are a point source, one or more NPDES permits must be obtained that will establish effluent limitations and other restrictions with which the drainage districts must comply. It is an inescapable reality that the tile drainage located on privately owned farm fields would then become a focus of compliance efforts associated with the NPDES permit(s). Although it is unclear precisely how, as a practical matter, those fields would be impacted in the short or long term. One possible outcome is that the drainage districts would assess fees against landowners that discharge into the drainage district to offset the costs of permit compliance.

³² *Id.* at 1, 2.

³³ See IND. DEP'T OF NATURAL RES., *Section 5.2 Tile Drain Installation and Repair* 5.2-1 (Oct. 13, 1996), <http://www.in.gov/dnr/water/files/Sec5-2.pdf>.

³⁴ See *id.*

³⁵ Drainage districts are but one type of "special water district" that could be eventually impacted by the DMWW decision. See, e.g., John H. Davidson, *Using Special Water Districts to Control Nonpoint Sources of Water Pollution*, 65 CHI.-KENT L. REV. 503, 505 (1989).

³⁶ Further, it should be noted that EPA regulations specifically exclude water flows from tile drainage as "waters of the United States", to wit: "Groundwater, including groundwater drained through subsurface drainage systems [is not water of the United States]." See 40 C.F.R. § 122.2(2)(v) (2015).

³⁷ DMWW Complaint, *supra* note 1, at 23.

³⁸ *Id.*

DMWW acknowledges that the drainage districts transport stormwater and groundwater, “but little or no irrigation return flow” and, most importantly, that “the conveyance of nitrate is almost entirely by groundwater transport.”³⁹ DMWW further alleges that because “stormwater flowing across a field or into a surface intake of a drainage district has little opportunity to dissolve nitrate produced by soil microorganisms or to interact with soil containing dissolved nitrate, only a very small concentration of nitrate can be found in agricultural stormwater runoff.”⁴⁰ This is a basic, but important, argument because it demonstrates a key tactic in how DMWW seeks to avoid a determination that the discharges at issue fall outside the “agricultural stormwater discharges” exemption.⁴¹

The DMWW CWA argument triggers the fundamental legal issue of whether the flows at issue—or some portion of those flows—are exempted from the statutory definition of point source because they constitute “agricultural stormwater discharges.”⁴² As noted, the outcome of this issue will be of great consequence to parties and stakeholders on both sides of the dispute in the Des Moines area, as well as other jurisdictions. A ruling that the drainage districts constitute a point source would represent a significant shift in how drainage districts and other special water districts around the nation are perceived under the CWA.

The specific issue raised in the DMWW lawsuit is not directly addressed in existing case law, though there have been a handful of cases to examine the “agricultural stormwater discharges” exemption.⁴³ Consequently, few decisions exist to provide guidance as to how this particular issue may be resolved in the DMWW action.⁴⁴

In 2011, a similar action, *Pacific Coast Federation of Fishermen’s Ass’ns v. Glaser*,⁴⁵ was initiated in the United States District Court for the Eastern District of California. *Pacific Coast Federation* is distinguishable from the DMWW action primarily because it involved the “return flows from irrigated agriculture” exemption.⁴⁶ However, it may still offer important

³⁹ *Id.* at 23, 29.

⁴⁰ *Id.* at 28-29.

⁴¹ *Id.*

⁴² *See id.* at 31.

⁴³ *See, e.g., Pac. Coast Fed’n of Fishermen’s Ass’ns v. Glaser*, No. CIV S-11-2980-KJM-CKD, 2012 WL 3778963, at *1 (E.D. Cal. Aug. 31, 2012).

⁴⁴ Some of these cases are discussed below. These cases are not binding precedent for the United States District Court for the Northern District of Iowa. Furthermore, the potentially fact sensitive nature of some aspects of the cases may present challenges in applying them to the DMWW case.

⁴⁵ *Pac. Coast*, 2012 WL 3778963, at *1.

⁴⁶ *See id.* at *1.

insight into the analysis the DMWW court could apply, assuming it reaches the point in which it considers the scope of the “agricultural stormwater discharges” exemption.⁴⁷

In *Pacific Coast Federation*, several environmental groups targeted the Grasslands Bypass Project, a project jointly administered by the U.S. Bureau of Reclamation and the San Luis & Delta-Mendota Water Authority (collectively defendants).⁴⁸ The Grasslands Bypass Project “uses a tile drainage system, consisting of a network of perforated drain laterals underlying Valley farmland that catch water and direct it into the San Luis Drain, and from there, into the Mud Slough, the San Joaquin River, and the Bay-Delta.”⁴⁹ Also similar to the DMWW lawsuit, the plaintiffs in *Pacific Coast Federation* asserted that the defendants’ “purposeful collection of contaminated groundwater, unrelated to the application of surface water to the land, and its direction to Mud Slough and the San Luis Drain without an NPDES permit, violates the CWA.”⁵⁰

The defendants’ chief argument in *Pacific Coast Federation* was that an NPDES permit was not required because the tile drainage system fell within the “irrigation return flows” exemption.⁵¹ The defendants in the DMWW lawsuit will raise the same argument regarding the “agricultural stormwater discharges” exemption.

In *Pacific Coast Federation*, the court issued a series of three procedural orders in 2012, 2013, and 2014, respectively considered arguments that centered on what groundwater discharges, if any, were not related to crop production and, therefore, plausibly fell outside the return flows from irrigated agriculture exemption.⁵² In the 2012 Order, “[t]he central dispute before the court [was] whether the Project’s long established method of

⁴⁷ See *Pac. Coast Fed’n of Fishermen’s Ass’ns v. Glaser*, No. CIV S-2:11-2980-KJM, 2013 WL 5230266, slip op. at *2 (E.D. Cal. Sept. 16, 2013) (reasoning in the *Pacific Coast Federation* Orders, especially the 2013 Order, compared the language found in the CWA regarding discharges composed of “return flows from irrigated agriculture” and discharges composed “entirely of return flows from agriculture.” An examination of the court’s analysis on this issue is outside the scope of this article, but the distinction could be relevant in distinguishing *Pacific Coast Federation* from the issue presented in the DMWW lawsuit).

⁴⁸ *Pac. Coast*, 2012 WL 3778963, at *1.

⁴⁹ *Pac. Coast*, 2013 WL 5230266, at *2.

⁵⁰ *Pac. Coast*, 2012 WL 3778963, at *4.

⁵¹ *Id.*

⁵² These were procedural and were generally considered in the light most favorable to the plaintiff. See *Pac. Coast*, 2012 WL 3778963, at *7; *Pac. Coast*, 2013 WL 5230266, at *5; *Pac. Coast Fed’n of Fishermen’s Ass’ns v. Murillo*, No. CIV S-2:11-2980-KJM-CKD, 2014 WL 1302102, slip op. at *1 (E.D. Cal. Mar. 27, 2014).

channeling waters through a subsurface tile system may render that system a 'point source' under the CWA."⁵³

The court analyzed legislative text and history specifically germane to the return flows from the irrigated agriculture exemption and determined that, for purposes of the parties' procedural motions, "the court cannot conclude at this phase of the proceedings that intentional drainage of contaminated groundwater is subsumed in the irrigation flows exemption."⁵⁴ The 2012 Order is of minimal substantive value to the issues presented in the DMWW lawsuit. However, the Order is important in setting the stage for the 2013 Order, and also in signaling that the court was willing to examine more deeply whether some portion of subsurface tile drainage flows fell within the irrigated agriculture exemption.

In the 2013 Order, the court recommenced its consideration of the core issue of whether the subsurface tile system employed by the Grassland Bypass Project was a point source under the CWA.⁵⁵ Here, the plaintiffs asserted that "some amount of the contaminated subsurface water, or groundwater, is unrelated to irrigation; hence, discharging it . . . without an NPDES permit violates the CWA."⁵⁶ The defendants countered that all discharges "related to crop production" fell under the return flows from irrigated agriculture exemption and were, therefore, not required to obtain an NPDES permit.⁵⁷ Further, one defendant conceded that some of the water discharged from the Grasslands Bypass Project constituted polluted groundwater, but that "the tile drains exist only because of the irrigation of agriculture and are therefore statutorily exempt."⁵⁸ The defendants in DMWW will also likely argue that the tile drainage, which empties into the ditches and other structures that comprise the drainage districts, exists to drain the excess moisture caused by stormwater that seeps beneath the surface of soil.

Following a relatively detailed examination and analysis of legislative language and history specific to the return flows from irrigated agriculture exemptions, the court stated the following:

However, plaintiffs do not plead adequate facts to support a claim that some amount of the Project's discharges is

⁵³ *Pac. Coast*, 2012 WL 3778963, at *1.

⁵⁴ *Id.* at *7.

⁵⁵ *Pac. Coast*, 2013 WL 5230266, at *1.

⁵⁶ *Id.* at *2.

⁵⁷ *Id.*

⁵⁸ *Id.* at *5 (citation omitted); see also *id.* at *7 ("The [defendant] admits that the Project serves one purpose: subsurface drainage") (citation omitted).

unrelated to crop production. Plaintiffs' conclusory allegation is that some amount of the discharges is unrelated to irrigation. Additionally, the complaint is not clear on whether the Project discharges when farmland is not being irrigated, for example, during winter months or when land is retired from crop production. The exhibit to the complaint might be read to imply the Project discharges during winter months when irrigation flows are at their lowest, but plaintiffs do not plead facts to support a claim that the discharges are unrelated to crop production. Defendant Authority, on the other hand, asserts the individual tile sumps underlying farmlands do not discharge at all when irrigation season ends or when farmers retire their land. *It may be that this dispute about off-season discharges is not material; for example, it may be relevant to the agricultural stormwater exception rather than the irrigated agriculture exemption. But a dearth of briefing on this issue precludes the court's addressing it at this juncture* (emphasis added).⁵⁹

The court then dismissed the plaintiffs' action without prejudice, ruling that it could file an amended complaint in line with the court's decision.⁶⁰

The plaintiffs subsequently amended their complaint, which was at issue in the 2014 Order.⁶¹ In the 2014 Order, the plaintiffs argued that the project discharges substantial amounts of groundwater not associated with irrigated agriculture.⁶² Specifically, these discharges were "groundwater that predates all farming in the area . . . groundwater that is discharged in fall and winter when little or no irrigation occurs; and . . . groundwater that originates from parcels where no farming occurs because the parcels are retired or fallow."⁶³ The defendants reasserted the argument that "the applicability of the exemption turns on whether the discharge was caused by an activity related to crop production or by some other activity, such as the disposal of toxic waste."⁶⁴

⁵⁹ *Id.* at *2.

⁶⁰ *Id.*

⁶¹ *Pac. Coast*, 2014 WL 1302102, at *1.

⁶² *Id.* at *2.

⁶³ *Id.*

⁶⁴ *Id.* at *3.

The court rejected the defendants' argument that all discharges related to crop production fell under the return flows from irrigated agriculture exemption. In so doing, the court stated:

If taken to its logical conclusion, the . . . interpretation would exempt any discharge made in the name of crop production without any closer inquiry into whether a majority of the total commingled discharge is in fact related to crop production. Such a loophole is not consistent with a fair reading of the CWA.⁶⁵

With respect to the plaintiffs' arguments, the court determined the following:

The court finds plaintiffs have pled sufficient facts to state a claim for a violation of the CWA. The only dispute before the court is whether the Project is exempt from the NPDES permit requirement because it is covered by the "return flows from irrigated agriculture" exemption. This court has interpreted that exemption to cover discharges from irrigated agriculture that do not contain additional discharges unrelated to crop production. Plaintiffs plead new facts that, when accepted as true, suggest at least some amount of the Project's discharges may be unrelated to crop production. . . . [T]he court reasonably infers, as it must at this stage of the litigation, that the Project's discharges are not composed "entirely of return flows from irrigation agriculture" because they contain additional discharges from polluted groundwater originating from retired land that no longer supports irrigated agriculture. The exemption does not cover these resulting commingled discharges because it is plausible that discharges from retired land, which no longer supports irrigated agriculture, are not related to crop production.⁶⁶

⁶⁵ *Id.* at *5.

⁶⁶ *Id.* at *4 (citation omitted).

The court concluded that the plaintiffs' claim that "groundwater under fallow or retired land" was the "sole valid allegation upon which this case may proceed."⁶⁷

In DMWW, it is unlikely that the "return flows from irrigated agriculture" exemption could similarly apply because irrigation is not a widespread practice in the watershed at issue.⁶⁸ However, the court could engage in the same or similar analytical approach charted in *Pacific Coast Federation* as it relates to the "agricultural stormwater discharges" exemption and consider whether, or to what extent, the discharges from tile drainage are related to agricultural production in the DMWW watersheds at issue.

In the 2013 Order, the *Pacific Coast Federation* court suggested that the Project discharges from groundwater under fallow or retired lands might fall under the "agricultural stormwater discharges" exemption.⁶⁹ That issue, magnified in light of the DMWW lawsuit, was not addressed in the 2014 Order, which is currently the last pronouncement from the court.⁷⁰

The United States Court of Appeals for the Second Circuit has also considered the "agricultural stormwater discharges" exemption on two occasions⁷¹—both in the context of confined animal feeding operations (CAFOs). In *Concerned Area Residents for the Environment v. Southview Farm*, a large dairy operation in New York attempted to use the agricultural stormwater exemption when heavy rains washed large amounts of manure into local streams.⁷² The court in the Southview Farm case held that the dairy in questions was a CAFO (Confined Animal Feeding Operation) that, by definition, is a point source and subject to NPDES permitting requirements regardless of the agricultural stormwater exemption.⁷³

About a decade later, the Second Circuit revisited the stormwater exemption in *Waterkeeper Alliance, Inc. v. EPA*.⁷⁴ In *Waterkeeper Alliance*, the court stated, "we believe it reasonable to conclude that when Congress added the agricultural stormwater exemption to the Clean Water Act, it was affirming the impropriety of imposing, on "any person," liability for agriculture-related discharges triggered not by negligence or malfeasance, but by the weather—even when those discharges came from what would

⁶⁷ *Id.* at *6.

⁶⁸ DMWW Complaint, *supra* note 1, at 23.

⁶⁹ *Id.*

⁷⁰ *Pacific Coast Federation* litigation is ongoing, so it is possible that the court will rule on this issue while the DMWW litigation proceeds.

⁷¹ *Concerned Area Residents for the Env't v. Southview Farm*, 34 F.3d 114 (2d Cir. 1994); *Waterkeeper Alliance, Inc. v. U.S. EPA*, 399 F.3d 486 (2d Cir. 2005).

⁷² *Concerned Area Residents*, 34 F.3d 114.

⁷³ *Id.* at 122-23.

⁷⁴ *Waterkeeper Alliance, Inc.*, 399 F.3d 486.

otherwise be point sources.”⁷⁵ Undoubtedly, the DMWW defendants will argue that the migration of nitrates to the drainage districts results from precipitation, citing the Second Circuit *Waterkeeper Alliance* decision as supporting precedent.⁷⁶

In *Fishermen Against the Destruction of the Environment, Inc., v. Closter Farms*, the United States Court of Appeals for the Eleventh Circuit held that “the discharged groundwater and seepage can be characterized as ‘return flow from irrigation agriculture’”⁷⁷ In *Closter Farms*, the defendants drained land to facilitate sugar cane production and pumped excess irrigation water directly into Lake Okeechobee.⁷⁸ The plaintiffs argued that this constituted a discharge that fell outside the scope of the “return flows from irrigated agriculture” exemption.⁷⁹ The court held that discharges from agricultural operations that are either “return flows from irrigation agriculture” or “agricultural stormwater discharges” are by definition not point sources and, therefore, do not require a NPDES permit.⁸⁰

IV. RELATED CWA LEGAL & POLICY ISSUES

The DMWW lawsuit occurs at a time when other CWA-based litigation is occurring in other jurisdictions. These cases are relevant to the broader legal and policy context in which they arise, namely the ongoing debate over how best to address the water quality impacts of agricultural production practices. Three of these areas include: (1) the scope of the EPA’s authority regarding the development of “Total Maximum Daily Loads” (TMDLs), (2) the potential shift towards increased development of numeric nutrient criteria for impaired waters, specifically including the Des Moines River and other waterbodies in the Mississippi River Basin, and (3) the jurisdictional scope of the CWA. Each of these areas is briefly discussed below.

⁷⁵ *Id.* at 507.

⁷⁶ *Id.* at 508.

⁷⁷ *Fishermen Against Destruction of Env’t, Inc. v. Closter Farms, Inc.*, 300 F.3d 1294, 1297 (11th Cir. 2002).

⁷⁸ *Id.* at 1296.

⁷⁹ *Id.* at 1297.

⁸⁰ *Closter Farms*, 300 F.3d at 1297-98.

A. Numeric Nutrient Criteria

The CWA envisions considerable cooperation between the federal and state governments, specifically including the development and implementation of water quality standards.⁸¹ States assume the primary role in the water quality standard development process as they bear responsibility for "reviewing, establishing, and revising water quality standards."⁸² The state-developed standards must be submitted to the EPA to verify that the standards will "protect the public health or welfare, enhance the quality of water," and otherwise fulfill the purposes of the CWA.⁸³ The CWA requires that states develop water quality standards that, among other requirements, specify designated uses for water bodies.⁸⁴ The states must also submit to the EPA the water quality criteria that will be implemented to protect those designated uses.⁸⁵ The water quality criteria are stated as narrative standards, numeric standards, or a combination of the two.

In the event that the EPA deems state-developed standards insufficient, the EPA communicates to the state the changes necessary to obtain approval or the EPA may establish federal water quality standards.⁸⁶ Consequently, states have a primary role in developing water quality standards while the EPA has backstop authority in the event a state does not fulfill its role insofar as it can promulgate a federal standard, whether it be narrative or numeric.⁸⁷

For example, a narrative criteria may say, "[s]urface waters shall be virtually free from floating non-petroleum oils of vegetable or animal origin, as well as petroleum-derived oils."⁸⁸ An example of numeric criteria is "[t]he ambient water quality criterion for cadmium is recommended to be identical to the existing drinking water standard, which is 10 µg/L (micrograms per liter)."⁸⁹ Numeric criteria focuses on establishing limits on the presence of specific pollutants in a water body, such as phosphorous, nitrates, or nitrogen, that enter water bodies such as the Des Moines River, its tributaries, or adjacent water bodies.⁹⁰ Compared to narrative criteria, numeric criteria are far more specific per pollutant (i.e., phosphorous,

⁸¹ See, e.g., *Am. Farm Bureau Fed'n v. U.S. EPA*, 792 F.3d 281 (3d Cir. 2015).

⁸² 40 C.F.R. § 131.4(a) (2015).

⁸³ 33 U.S.C. § 1313(c)(2)(A) (2015).

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ *Id.* § 1313(c)(3).

⁸⁷ *Id.*

⁸⁸ *Key Concepts Module 3: Criteria*, U.S. ENV'T PROT. AGENCY, <http://water.epa.gov/learn/training/standardsacademy/mod3/page6.cfm> (last updated Oct. 5, 2015).

⁸⁹ *Id.*

⁹⁰ *Am. Paper Inst., Inc. v. U.S. E.P.A.*, 996 F.2d 346, 349 (D.C. Cir. 1993).

nitrate, nitrogen), making it easier to trace the pollutant to the pollution source.

Several environmental organizations petitioned the EPA in 2008 to develop revised numeric water standards for nitrogen and phosphorous for all navigable waters; however, such standards have not been developed by states, nor have they been approved by the EPA.⁹¹ In 2011, the EPA denied the allegations.⁹² While the EPA agreed with the petitioners regarding water quality problems, including the Mississippi River Basin, the EPA stipulated that “it did not believe that the comprehensive use of federal rulemaking . . . [was] the most effective or practical means of addressing these concerns at this time.”⁹³ The EPA stated that the denial was not a determination that the new standards were not needed to meet CWA requirements, but was an exercise of “its discretion to allocate its resources in a manner that supports targeted regional and state activities to accomplish our mutual goals or reducing [nitrogen and phosphorous] pollution and accelerating the development and adoption of state approaches to controlling [nitrogen and phosphorous].”⁹⁴

The environmental groups also brought a legal action against the EPA in the United States District Court for the Eastern District of Louisiana.⁹⁵ That action, since decided by the federal district court and appealed to the United States Court of Appeals for the Fifth Circuit, has not provided the victory sought by the environmental organizations.⁹⁶ The matter is ongoing, however, and represents a significant intensification in the longstanding debate over whether, when, and under what circumstance numeric nutrient criteria should be developed by states or the EPA.

B. Scope of EPA TMDL Authority

States maintain primary responsibility for developing water quality standards. In so doing, the states establish effluent limitations for point sources in order to help meet those standards.⁹⁷ The CWA requires states to then submit a list to the EPA, commonly referred to as a § 303(d) list, of waters in which the effluent limitations imposed on point sources are not

⁹¹ See *Gulf Restoration Network v. McCarthy*, 783 F.3d 227, 231 (5th Cir. 2015).

⁹² *Id.*

⁹³ *Id.*

⁹⁴ *Id.*

⁹⁵ *Gulf Restoration Network v. Jackson*, No. 12-677, 2013 WL 5328547, at *1 (E.D. La. Sept. 20, 2013).

⁹⁶ *McCarthy*, 783 F.3d at 242.

⁹⁷ See 33 U.S.C. § 1311(b)(1)(A) (2015); see also *id.* § 1362(11).

sufficient to meet the water quality standards.⁹⁸ States must establish “Total Maximum Daily Loads” (TMDLs) for these waters, which must then be approved by the EPA.⁹⁹ However, if the TMDL is disapproved, the EPA has authority to establish the TMDL.¹⁰⁰ Since the 1990s, the EPA has drafted “thousands of TMDLs, which the EPA has described as the ‘the technical backbone’ of its approach to cleaning the nation’s waters.”¹⁰¹

In 2010, the EPA promulgated a TMDL for the seven-state Chesapeake Bay region through notice-and-comment rulemaking pursuant to the Administrative Procedures Act.¹⁰² The TMDL “includes point and nonpoint source limitations on nitrogen, phosphorous, and sediment for 92 segments of the Bay identified as overpolluted and further allocates those limits to specific point sources and to nonpoint source sectors.”¹⁰³ In addition to these allocations, the TMDL established deadlines and required “reasonable assurance” from the states that they would implement the TMDL.¹⁰⁴

In *American Farm Bureau Federation v. EPA*, the American Farm Bureau Federation (AFBF) and several other agricultural organizations filed a citizen suit that challenged the legality of the Chesapeake Bay TMDL.¹⁰⁵ The United States Court of Appeals for the Third Circuit described the plaintiffs’ arguments as follows:

Farm Bureau interprets the words “total maximum daily load” in the Clean Water Act . . . as unambiguous: a TMDL can only consist of number representing the amount of a pollutant that can be discharged into a particular segment of water and nothing more. Thus it argues that the EPA overstepped its statutory authority in drafting the Chesapeake Bay TMDL when the agency (1) included in the TMDL allocations of permissible levels of nitrogen, phosphorous, and sediment among different kinds of sources of these pollutants, (2) promulgated target

⁹⁸ See 33 U.S.C. § 1313(d)(1)(A).

⁹⁹ See *id.* § 1313(d)(1)(C).

¹⁰⁰ See *id.*

¹⁰¹ *Am. Farm Bureau Fed’n v. U.S. EPA*, 792 F.3d 281, 291 (3d Cir. 2015) (citing U.S. ENV’T PROT. AGENCY OFFICE OF WATER, TOTAL MAXIMUM DAILY LOAD (TMDL) PROGRAM DRAFT TMDL PROGRAM IMPLEMENTATION STRATEGY § 1.2 (1996), http://water.epa.gov/lawsregs/lawsguidance/cwa/tmdl/upload/2004_12_14_tmdl_strathp.pdf).

¹⁰² *Id.* at 287, 292.

¹⁰³ *Id.* at 292.

¹⁰⁴ *Id.*

¹⁰⁵ *Id.* at 287.

dates for reducing discharges to the level the TMDL envisions, and (3) obtained assurance from the seven affected states that they would fulfill the TMDL's objectives.¹⁰⁶

After extensive analysis, the court rejected the arguments raised by the plaintiffs.¹⁰⁷ The court concluded that "[e]stablishing a comprehensive, watershed-wide TMDL—complete with allocations among different kinds of sources, a timetable, and reasonable assurance that it will actually be implemented—is reasonable and reflects a legitimate policy choice by the agency in administering a less-than-clear statute."¹⁰⁸

Following the decision, the EPA can more readily leverage its authority to establish TMDLs that contain deadlines, point source, and nonpoint source allocations of different kinds of pollutants. The EPA, furthermore, can seek assurance from the state that the TMDL will be implemented. The Chesapeake Bay states, however, agreed that the EPA would establish the TMDLs instead of acting only in the instance they disapproved of a TMDL proposed by the states.¹⁰⁹ In the DMWW lawsuit, DMWW complains that the Iowa Reduction Nutrient Strategy lacks "(i) a timeframe for when the nutrient reduction will be achieved; (ii) numeric nutrient criteria standards; (iii) guidance on water quality monitoring; and (iv) any required conservation practices."¹¹⁰

C. *Waters of the United States*

The jurisdictional scope of the CWA extends to "the waters of the United States, including the territorial seas."¹¹¹ The CWA does not further define "waters of the United States."¹¹² The CWA, therefore, leaves it to the EPA and the United States Army Corps of Engineers to define "waters of the United States."¹¹³ The issue of what waters fall under the jurisdictional scope of the CWA remains controversial and the subject of debate in each branch of government. The EPA and the Army Corps have defined the term

¹⁰⁶ *Id.* at 294.

¹⁰⁷ *Id.* at 309.

¹⁰⁸ *Id.*

¹⁰⁹ *See id.*

¹¹⁰ DMWW Complaint, *supra* note 1, at 42.

¹¹¹ *See* 33 U.S.C. § 1362(7) (2015).

¹¹² *See id.*

¹¹³ *See id.*

several times and the application of those definitions has been litigated on many occasions.¹¹⁴

In 2001 and 2006, the United States Supreme Court issued rulings that interpreted the jurisdictional scope of the CWA narrower than the agency definition.¹¹⁵ These decisions contribute to ongoing confusion regarding the jurisdictional scope of the CWA, and triggered both the EPA and the Army Corps to issue agency guidance documents in 2003 and 2008.¹¹⁶ As a general rule, waters that are usable in interstate commerce (i.e. "traditional navigable waters") are accepted as being within the jurisdictional scope of the CWA.¹¹⁷ The more a body of water is isolated or removed from being used in interstate commerce, the more likely there is disagreement between the agency and others regarding whether the waters are within the jurisdictional scope of the CWA.¹¹⁸

The EPA and the Army Corps, consequently, published a proposed rule on April 21, 2014 designed to define the jurisdictional scope of the CWA.¹¹⁹ On May 27, 2015, agencies finalized the rule and the rule became effective on August 28, 2015.¹²⁰ The agencies' perspective, generally stated, is that the new rule revises the definition of "waters of the United States" in a manner consistent with the 2001 and 2006 U.S. Supreme Court decisions and provides clarification to the ongoing confusion about scope of CWA jurisdiction.¹²¹ Others disagree, specifically agricultural stakeholders who argue, generally speaking, that the proposed rule is a regulatory overreach by the agency outside the scope of the CWA.¹²²

¹¹⁴ See *Definition of Waters of the United States Under the Clean Water Act*, U.S. ENV'T PROT. AGENCY, <http://www.epa.gov/cleanwaterrule/definition-waters-united-states-under-clean-water-act> (last visited Dec. 20, 2015).

¹¹⁵ These decisions have been the subject of extensive legal literature and are not recounted here.

¹¹⁶ See *Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng'rs*, 531 U.S. 159 (2001); see also *Rapanos v. United States*, 547 U.S. 715 (2006).

¹¹⁷ See generally CLAUDIA COPELAND, CONG. RESEARCH SERV., RL43455, EPA AND THE ARMY CORPS' RULE TO DEFINE "WATERS OF THE UNITED STATES" 2 (2015).

¹¹⁸ *Id.*

¹¹⁹ Definition of "Waters of the United States" Under the Clean Water Act, 79 Fed. Reg. 22,188 (proposed Apr. 21, 2014) (to be codified at 7 C.F.R. pt. 110, 112, 116, 117, 122, 230, 232, 300, 302, 401).

¹²⁰ See 33 C.F.R. § 328.1 (2015); see generally *id.* §§ 110, 112, 116, 117, 230, 232, 300, 302, 401. An injunction was subsequently issued by the United States Court of Appeals for the Sixth Circuit that prevents implementation of the new rule.

¹²¹ See 33 C.F.R. § 328.1; see also *Rapanos v. United States*, 547 U.S. 715 (2006); *Solid Waste Agency of N. Cook Cnty. v. U.S. Army Corps of Eng'rs*, 531 U.S. 159 (2001).

¹²² See Amena H. Saiyid, *Proposed EPA, Corps Rule Clarifies Federal Jurisdiction Over Waters, Wetlands*, BLOOMBERG BNA (Mar. 25, 2014), <http://www.bna.com/proposed-cpa-corps-n17179889094/> ("Don Parrish, federal regulatory relations director for the American Farm Bureau Federation, maintained the group's opposition to the proposed rule, saying it would expand federal regulatory overreach over the nation's waters.").

Regardless of one's view on the new rule, it would expand the jurisdictional scope of the CWA beyond the scope set out in the agency guidance document. For example, current implementation of the CWA includes, among other waters, a tributary to traditional navigable water.¹²³ The final rule broadens the definition of the term tributary beyond what is currently implemented.¹²⁴ Another example is that current CWA implementation includes *wetlands* that are adjacent to traditional navigable waters.¹²⁵ The new rule modifies the scope of the CWA to include all *waters* adjacent to, among other waters such as interstate wetlands, traditional navigable waters.¹²⁶

The final rule is not at issue in the DMWW lawsuit. However, a determination that the drainage districts at issue are point sources would have far-reaching impacts in Iowa and elsewhere. At that time, the expanded definition of jurisdictional waters would be of increased importance.

V. CONCLUSION

The DMWW lawsuit is a significant legal development that warrants the attention of stakeholders in Iowa and beyond, specifically including within the Mississippi River Basin states. The DMWW action tests the boundaries of the CWA agricultural stormwater exemption, as well as whether, or to what extent, drainage districts in Iowa and beyond may be point sources and, therefore, subject to NPDES permit requirements.¹²⁷ The outcome of this issue alone raises serious implications for the agricultural sector, the conservation community, and others involved in the ongoing debate over the impact of agricultural production on water quality. The importance of the issue is further heightened when viewed in tandem with an expanding advocacy for the establishment of numeric nutrient criteria, the scope of the EPA's authority in promulgating TMDLs, and the scope of the EPA's jurisdiction over waters of the United States.

¹²³ See *Guidance to Identify Waters Protected by the Clean Water Act*, U.S. ENV'T PROT. AGENCY, <http://www.epa.gov/cwa-404/guidance-identify-waters-protected-clean-water-act> (last updated Oct. 27, 2015).

¹²⁴ See 33 C.F.R. § 328.3(c)(3); see also *Guidance to Identify Waters Protected by the Clean Water Act*, *supra* note 123.

¹²⁵ See 33 C.F.R. § 328.3(c)(4); see also *Guidance to Identify Waters Protected by the Clean Water Act*, *supra* note 123.

¹²⁶ See 33 C.F.R. § 328.3(a)(6); see also *Guidance to Identify Waters Protected by the Clean Water Act*, *supra* note 123.

¹²⁷ DMWW Complaint, *supra* note 1, at 2.; see also Kristine A. Tidgren, *Des Moines Board of Water Works Trustees Files Lawsuit*, IOWA STATE UNIV. CTR. FOR AGRIC. LAW & TAXATION (Mar. 16, 2015), <https://www.calt.iastate.edu/article/des-moines-board-water-works-trustees-files-lawsuit>.

If the DMWW were to ultimately succeed on its CWA claim, the drainage districts at issue would be required to obtain NPDES permits that placed limits on pollutants that flowed out of the drainage districts and into the Raccoon River and the Des Moines River. This would be a dramatic legal development that would reverberate throughout Iowa and other states. It would also represent a very significant shift in the environmental regulation of agriculture. That said, the DMWW legal process could take years to conclude, which will overlap with other legal and policy developments mentioned in this article.

Regardless of the outcome of any action DMWW ultimately pursues, the legal process will likely take years to conclude. Additionally, assuming DMWW ultimately prevails on its CWA argument, the role of the drainage districts in their post-NPDES permit world could also take years to address. As noted, this process would evolve at the same time as the ongoing issues of jurisdictional scope of the CWA and the development of numeric nutrient criteria.